

III. REMARKS

1. Claims 1, 2, 6-9, 11, 13-15, 19, 20, 24-27, 29, 32, 33, 37-43, and 54-83 remain in the application. Claims 3-5, 10, 12, 16-18, 21-23, 28, 30, 31, 34-36, and 44-53 have been cancelled without prejudice. Claims 1, 6, 19, 24, 41-43, 54-57, and 68-70 have been amended. Support for the amendments may be found in the specification, for example, on page 5, lines 24-28, which discloses adjusting filter parameters according to block type, and on page 1, lines 3-7, which discloses block type being defined according to a coding method.

2. Applicant appreciates the courtesies extended by the Examiner during the telephone interview of 14 April 2008.

3. Applicants respectfully submit that claims 1, 2, 6-9, 11, 13-15, 19, 20, 24-27, 29, 32, 33, 37-43, and 54-81 are not anticipated by Kalevo et al. (WO 98/41025, "Kalevo") under 35 USC 102(b).

3.1. Kalevo fails to disclose or suggest:

performing an adaptive block boundary filtering operation on a block boundary formed between a first decoded image block on a first side of the block boundary and a second decoded image block on a second side of the block boundary, the first decoded image block having been encoded using a first type of prediction encoding method and the second decoded image block having been encoded using a second type of prediction encoding method,

wherein at least one parameter of the filtering operation is determined based on the types of the first and second prediction encoding methods.

as essentially recited by independent claims 1, 19, 41-43, 54-57, and 68.

Applicant fails to find that at least one parameter of the filtering operation is determined based on the types of the first and second prediction encoding methods in Kalevo.

Kalevo discloses a filtering arrangement for removing blocking artifacts, in particular by selecting a certain number of pixels for examination from both sides of a block boundary. As disclosed on page 3, lines 13-18, the number of pixels selected for examination depends on the image content of the frame in the environment of the block boundary. Page 4, lines 8-20 states that the number of pixels to be corrected, the characteristic features of the filter being used and the size of the filtering window depend upon the following factors:

- a) the difference between pixel values across a block boundary to be filtered;
- b) the size of the quantization step of the transformation coefficients used in transformation coding of the image blocks; and
- c) differences in values between pixels on the first side of the block boundary and corresponding differences between pixels on the second side of the block boundary.

Nowhere does Kalevo disclose that at least one parameter of the filtering operation is determined based on the types of the first and second prediction encoding methods used to respectively encode blocks on either side of the boundary.

At least for these reasons, Applicants submit that Kalevo does not anticipate independent claims 1, 19, 41-43, 54-57, and 68, and dependent claims 2, 6-9, 11, 13-15, 20, 24-27, 29, 32, 33, and 58-67.

3.2. Kalevo also fails to disclose that a filter is arranged to operate adaptively according to the block types of the frame in the environment of the block boundary, where a block type is defined according to the coding method for the block, as recited by claims 37-40.

Applicant finds no disclosure related to operating a filter according to a block type as defined by the claims. As argued above, Kalevo discloses various factors for

determining the features of a filter, but none include operating a filter according to the block types of the frame in the environment of the block boundary.

Therefore, Kalevo fails to anticipate independent claims 37-40.

3.3. Kalevo also fails to disclose performing a filtering operation on a block boundary that is dependent at least in part on a prediction encoding method used to encode an image block on a first side of the block boundary, as recited by claims 69 and 70.

As argued above, Kalevo utilizes a limited set of factors for determining a number of pixels to be corrected, characteristic features of a filter to be used and a filtering window size. The factors disclosed are: the difference between pixel values across a block boundary to be filtered; the size of the quantization step of the transformation coefficients used in transformation coding of the image blocks; and differences in values between pixels on the first side of the block boundary and corresponding differences between pixels on the second side of the block boundary.

There is no disclosure in Kalevo related to a filtering operation on a block boundary that is dependent at least in part on a prediction encoding method used to encode an image block on a first side of the block boundary.

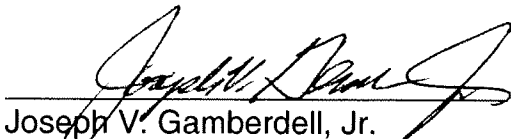
At least for these reasons, Kalevo fails to anticipate independent claims 69 and 70 and dependent claims 71-73, 82 and 83.

For all of the foregoing reasons, it is respectfully submitted that all of the claims now present in the application are clearly novel and patentable over the prior art of record, and are in proper form for allowance. Accordingly, favorable reconsideration and allowance is respectfully requested. Should any unresolved issues remain, the Examiner is invited to call Applicants' attorney at the telephone number indicated below.

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Respectfully submitted,


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Date

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